Supplementary Material

An efficient and scalable synthesis of thiazolo ring fused 2-pyridones using flow chemistry

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C10 from flow synthesis:

**1H NMR:**

![1H NMR spectrum](image)

**13C NMR:**

![13C NMR spectrum](image)
Chiral HPLC traces:

Chiral HPLC of cyclopropyl thiazoline 11 was carried out using a Diacel Chiracel OD-H (250 x 4.6 mm) column and eluting isocratically (Hexane:iPrOH 90:10) at ambient temperature, then detected by UV at 254 nm. Injection was 10 μL at 1 mg/mL in CHCl₃. Chiral HPLC of pyridone 13 was carried out using a Lux 5 μm i-amylose-1 (250 x 4.6 mm) column and eluting on a gradient (iPrOH 30:70 to 100% hexane) at ambient temperature, then detected by UV at 254 nm. Injection was 10 μL at 1 mg/mL in MeOH.

Thiazoline (pure):

Supporting Figure 1. Chiral HPLC trace of thiazoline 12, as used for MWI and flow syntheses. ee of the mixture = 100%, [α]D +83° (c 0.5, CHCl₃)
Thiazoline (epimerized):

**Supporting Figure 2.** Thiazoline 12 post-epimerization, demonstrating that R and S forms can be distinguished. ee of the mixture = 52%, [α]_D +44° (c 0.5, CHCl₃).
Thiazoline (mixture of enantiopure and epimerized thiazoline):

Supporting Figure 3. Mixture of pure and epimerised thiazoline 12 confirms the identity of the peaks. ee of the mixture = 74% (c 0.5, CHCl₃).
2-Pyridone 13 (Prepared using MWI conditions):

**Supporting Figure 4.** Enantiopurity of pyridone 13, as synthesised by MWI. ee of the mixture = 82%, $[\alpha]_D$ -188° (c 0.5, CHCl$_3$).
2-Pyridone 13 (Prepared under flow conditions):

**Supporting Figure 5.** Enantiopurity of pyridone 13, as synthesised by flow. ee of the mixture = 73%, $\alpha_D^-146^\circ$ (c 0.5, CHCl₃).
MeOH blank injection (baseline control)

Supporting Figure 6. Blank Injection of MeOH to account for the HPLC baseline.